Epi Notes

North Carolina Department of Health and Human Services ◆ Division of Public Health

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In This Issue:

Mad Cow Disease and Other TSEs: Should North Carolinians Be Concerned?

Prepared by J. Newton MacCormack, MD, MPH, Head, General Communicable Disease Control Branch

Cannibalism can be a dangerous practice, whether carried out electively by humans or forced upon domestic animals.

There is a group of fatal neurodegenerative diseases of humans and various animals known collectively as transmissible spongiform encephalopathies (TSEs). Once attributed to "slow viruses" because of their apparently prolonged incubation periods, they are now attributed to a class of abnormal proteins called prions. This prion protein, or PrP, behaves as an infectious particle and may be derived by mutation from a protein found in normal brain cells. Prions are extremely resistant to standard disinfectants and heat sterilization but can be inactivated by the proper concentrations of harsh chemicals like sodium hydroxide.

The first link of TSEs with cannibalism came with the studies of Carleton Gajdusek, who investigated a TSE called kuru occurring predominately among women of the Fore tribe of aboriginals in New Guinea. From the observation that these women practiced a form of ritualistic cannibalism involving consumption of human brain tissue, including those dying of kuru, Dr. Gajdusek hypothesized that some infectious agent in this tissue might be responsible for this slowly progressive but invariably fatal encephalopathy. After several years of observation of chimpanzees that he had injected with extracts from the brains of people dying from kuru, he observed that they developed degenerative

brain diseases very much like kuru. Kuru has virtually disappeared from New Guinea since cannibalism was abandoned in 1959.

Another TSE, scrapie, affects sheep and goats and was first recognized more than 250 years ago in western Europe. Imported into the United States in 1947, it now occurs worldwide (except in Australia and New Zealand). For many years, even with mutton and goat meat being commonly consumed in many countries, the disease was apparently confined to these species. Domestic animals that are slaughtered for their meat become part of their own food chain when the offal from the slaughter process is made into a meat and bone meal protein supplement. This amounts to a forced form of cannibalism. Even though sheep dying of scrapie were included in this "recycling" process for many years, this did not seem to present a problem—until a change in the rendering process in Great Britain in the late 1970s or early 1980s. The older solvent extraction method for preparing this protein supplement (one that, in retrospect, was efficient in removing infectious scrapie prions) was replaced by one involving centrifugation and pressing. Then, in 1986, the first case of "mad cow disease" was recognized in England.

Mad cow disease, more properly known as bovine spongiform encephalopathy (BSE), has decimated the British beef industry. This TSE, as it turns out, is the bovine form of scrapie, and the British BSE epidemic that peaked in early 1993 apparently got started because of the change in processing the protein supplement. It was brought under control when the practice of feeding ruminant-derived protein to ruminants was banned in the United Kingdom in 1988. However, cases have now been recognized in several other countries, mostly in western Europe. Unfortunately, the TSE story doesn't end there.

Creutzfeldt-Jakob disease (CJD) is a human TSE first described in the 1920s. Recognized as the most common human TSE, it occurs in several forms. There is a sporadic form that accounts for about 85 percent of cases, a familial form of genetic origin (mutations of a gene on chromosome 20 resulting in inheritance of CJD as an autosomal dominate trait), and an iatrogenic form traceable to contamination of medical substances like human growth hormone or dura mater grafts. CJD has a worldwide incidence of about one case per million per year. The sporadic form generally begins after age 60; it is extremely rare before age 40.

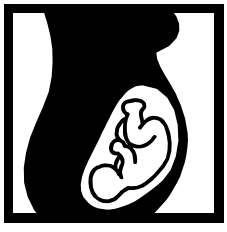
In 1995, the first of a series of CJD cases in young British Isle residents was recognized. While some features of this "new variant" CJD (nvCJD) resemble those of sporadic CJD, several differences exist. Besides a predilection for teens and young adults, nvCJD has a more protracted course, and dementia generally begins later than in sporadic CJD. Through the end of November 2000, there were accumulated totals of 87 definite and probable cases of nvCJD in the United Kingdom, three in France, and a single case in Ireland. In the opinion of most experts, nvCJD is the result of transmission of the BSE prion to humans.

So, should North Carolinians be concerned about all this? Yes and no. Yes, because we now have strong reason to believe that the prototype TSE prion—the one that causes scrapie—has demonstrated a capacity to cross species barriers to humans by passage through cattle. In addition, since we do not know the incubation period for nvCJD, the number of cases might grow dramatically in the next few years if large numbers are still incubating this TSE. However, there is guarded optimism that the outbreak of nvCJD will subside coincident with the apparent control of the BSE epidemic in the U.K. It is also reassuring that, reportedly because of stringent agricultural and other control measures in this country and despite intensive surveillance efforts, neither BSE nor nvCJD has been found in the United States.

In any case, we need to avoid cannibalism. ■

Monitoring Neural Defects: Is Folic Acid Making a Difference?

Prepared by Robert E. Meyer, PhD, Birth Defects Monitoring Program, Center for Health Informatics and Statistics



Neural tube defects (NTDs), which include anencephaly, spina bifida, and encephalocele, are among the most commonly occurring preventable birth defects in the United States. Affecting approximately

one in every 500 pregnancies in North Carolina each year, NTDs occur at a higher rate in our state than in most other areas of the country.

In 1992, the U.S. Public Health Service recommended that all women of childbearing age consume 400 μg of folic acid daily in order to decrease their risk of having an NTD-affected pregnancy. In 1996, the Food and Drug Administration issued a rule, effective January 1998, that required all enriched grain products to be fortified with folic acid. However, the fortification level set by the FDA has been estimated to increase the average woman's dietary intake of folic acid by only one-fourth of the amount recommended by the Centers for Disease Control and Prevention (CDC). For this reason, CDC, the Institute of Medicine, the March of Dimes, and other groups continue to urge all women capable of becoming pregnant to supplement their usual diet with 400 μg of synthetic folic acid in the form of a daily multivitamin.

Since the mid-1990s, efforts to raise public awareness about the benefits of folic acid have increased dramatically at the local, state and national level. In North Carolina, this effort has been led by the March of Dimes, in conjunction with the N.C. Folic Acid Council and the Division of Public Health. In order to assess the effect of the fortification program and folic acid education activities on the rate of neural tube defects, the N.C. Birth Defects Monitoring Program has initiated an NTD Rapid Ascertainment System. Our state's system, which is funded through a CDC cooperative agreement, is part of a larger rapid ascertainment system, involving at least 18 participating states and covering over 50 percent of all births in the U.S. CDC is currently analyzing the aggregate data submitted by the 18 states. The following is a brief summary of the trends seen in North Carolina for the period 1995-1999.

Between 1995-96 and 1998-99, the rate of NTDs in North Carolina declined by 22 percent. Most of this decline was due to a decrease in the rate of spina bifida, which fell by 26 percent, from 6.2 per 10,000 live births to 4.6. In contrast, the rate of anencephaly declined by only 3 percent. A closer look at the sources of the decline in the spina bifida rate indicates that the decline was not uniform across the population. Specifically, the decline in spina bifida was more pronounced among women ages 30 and above, who had more than a high school education, and who were not on Medicaid. The decline also varied considerably geographically, with the western part of the state showing the greatest improvement (47 percent decline) and the eastern region showing the least change (3 percent decline).

The recent decline in spina bifida can be attributed, to some extent, to the folic acid fortification program. However, the fact that the decline was not uniform across all sociodemographic groups, but rather was more pronounced among older, better educated women, provides evidence that folic acid education efforts have likely played at least as great a role as has fortification. As data from the North Carolina Pregnancy Risk Assessment Monitoring System show, preconceptional intake of multivitamins is much higher among these women compared to younger, less educated women. With the full effects of the fortification program having already been realized, continued progress in reducing the rate of spina bifida and other folic acid preventable birth defects will require intensified efforts to educate all women about the importance of consuming a daily multivitamin containing 400 μg of folic acid, in addition to eating a balanced, healthy diet. ■

EPA and FDA Announce Advisories on Methylmercury in Fish

Prepared by Luanne Williams, Scientific Advisor for the State Health Director

Fish can be an important source of nutrition. However, the pollutant methylmercury concentrates in fish, with larger fish generally accumulating higher levels. The developing nervous systems of fetuses and young children could be adversely affected by routine exposure to methylmercury. The EPA and FDA advisories, issued on Jan. 12, recommend that women of childbearing age and children limit their consumption of fish.

FDA recommends that pregnant women, women planning to get pregnant, women who are breast feeding, and children not eat shark, swordfish, king

mackerel or tilefish. In addition, the recommendation states that these women and children limit their consumption of fish bought in stores (including canned tuna) and restaurants to no more than two meals per week (12 ounces of cooked fish per week for women and 4 ounces of cooked fish per week for children). [1] For these same groups, EPA recommends limiting consumption of all fresh water fish (from lakes, rivers and streams) to one meal per week (6-ounce meal for women and 2-ounce meal for children). Furthermore, the EPA advises that if, in one week, one of these individuals consumes two meals of fish from a store or a restaurant, that person should not eat any freshwater fish caught by family or friends during that same week. [1]

Adverse Health Effects of Methylmercury

Since methylmercury can damage the developing brain, babies in the womb, nursing babies, and young children are at most risk. Excessive methylmercury exposure may affect behavior and the ability of children to learn, think and problem-solve later in life. Methylmercury has also been associated with numbness or tingling in hands and feet, decreased coordination, and changes in vision in adults. The effects observed in adults are generally less severe than those observed in developing fetuses at comparable doses.[2]

The EPA and FDA advisories came after a toxicological review of mercury by distinguished scholars within the National Academy of Sciences (NAS). In its report, the NAS estimated that approximately 60,000 developing fetuses in the United States may be at risk of developmental problems as a result of the mothers' consumption of fish containing mercury.[2]

Department of Health and Human Services Change in Issuance of Fish Advisories

Because of the recent NAS review and the EPA and FDA advisories, the North Carolina Department of Health and Human Services (DHHS) staff is in the process of reviewing the current approach for issuing fish consumption advisories and for collecting freshwater fish sampling data across the state. DHHS will be working closely with other agencies, including local health departments, in developing a new approach for issuing fish consumption advisories and for educating the public about the risks and benefits of fish consumption. Contact Dr. Luanne Williams at 919-715-3730 for questions or comments.

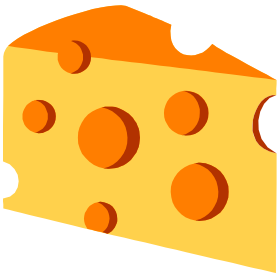
References

[1] http://www.epa.gov/ost/fishadvice/advice.html

[2] Toxicological Effects of Methylmercury, National Research Council, National Academy Press, Washington, DC 2000. ■

Listeria-Associated Birth Complications Linked to Homemade Mexican-style Cheese, Winston-Salem, North Carolina, 2000

Prepared by Pia MacDonald, MPH, PhD, Epidemic Intelligence Service Officer



Each year in the United States, an estimated 1,850 people become seriously ill and 425 die from the bacterial disease listeriosis. Despite the relatively low numbers of severe infections, at any particular time 10 to 30 percent of us carry *Listeria monocytogenes* in our intestines without becoming ill. However, pregnant women, newborns and persons with weakened immune systems are at special risk of serious disease from *Listeria*. Infection during pregnancy can precipitate stillbirths, spontaneous miscarriages, premature births and serious newborn infections. Pregnant women account for 27 percent of all cases and 60 percent of the cases between 10 and 40 years of age. Elderly and immunocompromised patients may present with sepsis or meningitis, whereas in healthy people, illness is usually mild and usually includes symptoms such as fever, muscle aches and gastrointestinal upset.

The General Communicable Disease Control Branch, working with the Forsyth County Health Department, Centers for Disease Control and Prevention, Food and Drug Administration, and N.C. Departments of Agriculture and Consumer Services and Environment and Natural Resources, has been investigating an outbreak of *L. monocytogenes* infections in Winston-Salem. Between October 24, 2000 and January 4, 2001, twelve people were admitted to a hospital diagnosed with listeriosis. Many of these patients reported eating unlabelled cheese bought at local markets or from door-to-door vendors. We conducted a case-control study to determine risk

factors for illness, an environmental investigation to find and eliminate the source of the contaminated product, and a microbiologic DNA examination of the patient and food *Listeria* isolates to determine if they were linked.

Although listeriosis is not currently a reportable disease in North Carolina, health care practitioners in Winston-Salem became concerned and alerted the local health department when three Hispanic local patients were diagnosed with this disease within a two-week period. We initiated a case-control study with case-patients reported by the two Winston-Salem hospitals. A case was defined by illness with *L. monocytogenes* isolated from a normally sterile site in a Winston-Salem resident during the October 24, 2000 - January 4, 2001 period. Controls were matched on sex, age, pregnancy status and residence.

All patients were Hispanic, Winston-Salem residents. Eleven female patients were identified, aged 18-38 years (median=21), and one 70-year-old immunocompromised male. The affected women were Mexican by birth and non-English speakers. Most of these women had lived in the U.S. for less than two years. Ten women were pregnant, and infection with *Listeria* resulted in five stillbirths, three premature deliveries, and two infected newborns.

Results from the case-control study suggested that people who ate cheese purchased from door-to-door vendors were 17 times more likely to have become ill from *Listeria* infection than those who did not. Similarly, people who reported consuming queso-ranchero and queso-fresco were 9 and 7 times, respectively, more likely to have been ill.

A DNA-fingerprinting method called Pulsed Field Gel Electrophoresis (PFGE) was used to compare *Listeria* organisms cultured from patients with cheese and raw milk samples. PFGE results to date indicate that isolates from four patients, cheese samples from two stores, cheese retrieved from the home of a patient, and raw milk from a local manufacturing grade dairy all matched. Evidence of DNA-identified identical organisms from food and patients has been compared to possessing "a smoking gun with fingerprints at the scene of a crime."

In summary, this outbreak was linked to consumption of noncommercial, homemade, Mexican-style cheese produced from contaminated raw milk sold by a local farm. It is the first *Listeria* outbreak in the U.S. to implicate raw milk from a specific dairy farm as the vehicle of transmission.We recommend improving education for pregnant Hispanic women regarding the hazards of consuming unpasteurized fresh cheese, as well as tightening laws prohibiting the sale of raw milk. Furthermore, we intend to seek adoption of a rule to have listeriosis made a reportable disease. ■

Automation of North Carolina Vital Records, 2001-03

Prepared by Dr. John Booker, Director, and the SystemX Project Team, Center for Health Informatics and Statistics

The Vital Records Unit is responsible for legally registering all births, deaths, fetal deaths, marriages, and divorces that occur in North Carolina, coding these events for statistical purposes, maintaining these records, and providing certified or uncertified copies to individuals, researchers and public health programs. The unit has 56 employees and processes more than 300,000 records per year. The vital events registration process also involves a statewide system of local registrars and health department personnel, registers of deeds, hospital and nursing home staff, physicians, medical examiners, funeral directors, clerks of court, and others.

Today, North Carolina's Vital Records program employs business practices not significantly different from those in effect 30 years ago. The inefficiency and ineffectiveness of the existing business processes, coupled with chronic staff turnover, leaves Vital Records unable to meet its obligations. Vital Records will have to undergo extensive changes to its automation systems in order to meet federal requirements in the next few years.

Approximately every 10 years, the national standards for birth and death certificates are updated. The last revision occurred in 1988, and the next revision will take place in 2003. The format (layout) and content of the data set will be changed substantially with the introduction of a new standard certificate in 2003.

These requirements can be met through a vendor-provided comprehensive system, built on top of a relational

database. Such a system would provide these advantages:

a. All vital events would be managed within one seamless system, circumventing the handling of documents, reducing potential human error and the inefficiencies of a paper flow system.
b. Many manual operations requiring multiple staff would be eliminated.
c. Monitoring of the flow and status of records would be greatly improved.
d. The time between the initial reporting of the vital event and the issuance of a certificate or submission of a data file would be dramatically reduced. This would allow the Vital Records Unit to meet all of the contractual obligations for timeliness required by both NCHS and SSA.
e. State Vital Records would have the potential to maintain one database to serve the entire state, facilitating statewide issuance of certificates in all counties and eliminating the need for 'verification' between state and county records.
f. Overall, the new system would be expected to be less expensive to operate while providing more timely, more accurate information and enabling better access to all users of vital records and statistics.
g. Vital Records would be able to take advantage of the new technology to improve its organizational design, improve quality of records and services, and incorporate technology into the specifications of many staff positions, offering more and better employment opportunities as a means to overcome current recruitment and retention problems.
h. Vital Statistics would have accurate data for statistical analysis at any time, without concerns over data completeness or quality.
i. The new system would allow the Center for Health Informatics and Statistics (CHIS) to share data easily with other state agencies such as Boards of Election, Commerce, Employment Security Commission, to name a few.
j. The new system will also allow CHIS to become HIPAA-compliant with respect to data standards as well as confidentiality and security of data.

North Carolina Vital Records is fortunate to be able to take advantage of recent lessons learned by a number of other states that have begun implementation of new vendor-provided automation systems. Over the past two years, Ohio, Michigan, Florida, Alaska, Maryland and other states have all signed contracts with vendors for new systems. While each state has its own special provisions in vital records statutes, characteristics of certificates, etc., the business of vital records is extensively uniform across the country. This puts vendors in the position of customizing systems rather than developing products for each state, and means that the knowledge shared across the states has been incorporated into the new systems on the market. This puts North Carolina in a favorable position for comprehensively modernizing its own vital records system. ■

Emerging Communities Program

Prepared by Arthur Okrent, Manager, AIDS Care Unit, HIV/STD Prevention and Care Branch

North Carolina will be receiving more than half a million dollars in funding for HIV/STD services in FY 2001 through the new Emerging Communities Program. The program was enacted as a part of the reauthorization and amendment, in 2000, of the 1990 Ryan White CARE Act. It is included as part of the funding for Title II of the Act, which provides support to each state and territory.

Title I of the Ryan White CARE Act provides direct support to cities that have met a minimum threshold of AIDS cases for the preceding 5 years. However, that threshold has been slowly rising over the years, and no new Title I cities have been designated. There has been a recognition, however, that a group of Standard Metropolitan Statistical Areas (SMSAs) are experiencing a significant need to enhance HIV/AIDS services, even though they do not qualify for the Title I program.

The Emerging Communities Program was designed to address this need. It provides funding to designated localities in selected states to address crucial HIV/AIDS care needs through the state's Title II program, when the national Title II base allocation exceeds the previous year's allocation by $20 million. Health Resources and Services Administration (HRSA) has interpreted the funding allocation for the FY 2001 Ryan White program to meet this threshold, and so the Emerging Communities Program will be initiated with funding beginning April 1, 2001.

North Carolina and 23 other states will qualify for Emerging Communities funding in FY 2001. Three SMSAs in the state have been designated – Charlotte, Greensboro/ Winston-Salem and Raleigh/Durham. The total funding allocated for these areas in FY 2001 is $573,843 (the individual area allocations have not yet been determined). The funds will come to the state and be passed through to the localities through a process yet to be determined.

HRSA is in the process of developing the policies and procedures governing the use of these funds. A non-supplanting provision will not allow for State Title II funds to be diverted from these areas as a result of the infusion of these new monies. All other requirements, including delineation of the planning process which will need to be implemented, must await the final guidelines from HRSA. ■

Ending the Silence: The Faith Community Speaks Out

Prepared by Myra Allen, Public Health Educator, HIV/STD Prevention and Care Branch

The North Carolina Annual HIV Faith Conference was held March 1-2, 2001 in Greenville, N.C. at the Hilton Inn. The conference's purpose was to increase awareness and knowledge of HIV/AIDS, particularly as the diseases continue to impact, affect and impede the lives of North Carolina citizens, especially in minority communities.

In the African-American, Hispanic/Latino, and other minority communities, the church is one of the most trusted, respected, and stable institutions; it is often instrumental in engaging individuals and bringing about fundamental behavioral changes in their lives. This gathering provided an opportunity and a forum for the discussion and examination of the role of the church in promoting behaviors that reduce the spread of HIV/AIDS. Both clergy and lay persons from various churches were exposed first-hand to moving testimonials from persons living with and/or affected by the disease. A common thread woven throughout the varied tales was the role that the church could have, or did, play in helping an individual or family come to grips with the reality of HIV/AIDS.

Approximately 200 clergy, pastors, and lay people from within the faith community who have an interest in helping those impacted by HIV/AIDS attended. The keynote speaker was Rev. Edward Clifton Sanders, II of Metropolitan Interdenominational Church in Nashville, Tenn. Several model programs were showcased that demonstrated successful partnerships between faith communities and community-based organizations. Some of the community-based organizations highlighted were SOZO Ministries of Rocky Mount; Rocky Mount Opportunities Industrialization Center (also in Rocky Mount); Mt. Sinai Faith, Hope and Love Ministries of Thomasville; and the Cape Fear Regional Bureau for Community Action of Fayetteville. ■

Lead Poisoning: Prevention through Education

Prepared by Kimberly Hattaway, Public Information Officer, Division of Environmental Health

Despite considerable progress in reducing lead sources over the past twenty years, childhood lead poisoning remains one of the most serious – and most preventable – environmental health problems facing children in the U.S. Approximately one million children nationwide have elevated blood lead levels, which can result in serious behavioral and learning problems, hearing loss, slowed growth, kidney damage, seizures, and even death.

Through better public awareness about the potential risks associated with lead exposure, common sources of lead, who is most at risk for lead poisoning, and how lead poisoning can be prevented, families and communities can learn how to reduce the incidence of childhood lead poisoning.

Recent studies have indicated that even low levels of lead in the bloodstream can affect children's intelligence, hearing, growth and behavior. Low-level exposure is also associated with juvenile delinquency and even criminal behavior. Such low levels of lead exposure may not cause obvious symptoms, making detection difficult. If victims do express symptoms, these symptoms might include fatigue, irritability, difficulty

concentrating, headache, tremors, abdominal pain, vomiting, constipation or weight loss. Acute lead poisoning is less common than more chronic exposure, but it can have extremely serious consequences, including stupor, convulsions, coma and death.

Historically speaking, many sources of lead have already been identified and reduced or eliminated from the environment. These include leaded gasoline, certain food and beverage cans, lead in industrial emissions, lead in drinking water, and lead in hazardous waste sites.

While lead-based paint used on houses was banned in 1978, this paint continues to be the most common source of lead poisoning for children today because it remains on many older houses. As lead-based paint deteriorates with time, it chips and peels, presenting a hazard for young children. Young children may pick up paint chips and put them in their mouths. They can also ingest or inhale paint dust. Paint on home exteriors may end up in soil where children play. Moisture problems in a home, which accelerate the deterioration of paint, may increase the presence of chipped and peeling paint. Lead-contaminated dust can also be created when a house is remodeled or renovated. Floors and window sills are common locations where lead-based paint chips or contaminated dust collects, due to the friction between two painted surfaces caused by opening and closing doors and windows.

Other potential sources of lead include vinyl miniblinds, soft vinyl toys, pewter, batteries, ceramics and pottery, stained glass and other hobby materials, fishing and hunting supplies, cosmetics, food and traditional medicines. Adults may also bring home lead dust from certain industrial jobs.

Because their developing systems easily absorb toxins such as lead, children under age six are most at risk for lead poisoning. Children ages one and two are especially susceptible to lead exposure because at this age they typically explore by mouthing objects and crawling on floors.

Even fetuses are at risk for lead poisoning from the lead stored in their mothers' bones and passed to them through the placenta. To protect growing fetuses, pregnant women should get plenty of calcium. A recent study indicated that diets high in calcium lowered the levels of lead in the blood of pregnant women.

While lead poisoning is an equal-opportunity affliction, nationally it is most prevalent among the poor, minorities, urban dwellers and those living in older housing. North Carolina is atypical in that it sees more cases of lead poisoning in rural counties in the eastern part of the state than in its urban centers. This is because the housing stock in rural eastern North Carolina is older than housing in the metropolitan areas.

There are many things that families can do to prevent lead poisoning. Parents should take care to make sure that children's hands, faces and fingernails are clean, particularly before eating and after playing. It is also a good practice to take off shoes and leave them at the door after coming inside the house. Parents should watch out for children putting toys, paint or dirt in their mouths or chewing on painted surfaces. Because children tend to put toys in their mouths, toys should be washed frequently. Children should not be allowed to play with batteries or anywhere near peeling paint. Parents should make sure that children play in safe, grassy areas.

Keeping the house clean is also important. Floors, walls, and window sills should be cleaned often with a household detergent. Surfaces should be damp-mopped or wiped. Simple dusting will not remove lead-contaminated dust, which is invisible, sticky and dense. Miniblinds should be checked for lead. Painted boards should not be burned in fireplaces.

Removing lead-based paint and dust calls for special cleaning methods. Old paint should not be removed by dry scraping or sanding; wet scraping and sanding are safer ways to remove lead-based paint. To vacuum paint chips or dust, a special high efficiency particle air filter vacuum should be used.

Good nutrition is also important. When preparing infant formula or cooking, one should always use cold water that has run for a few minutes. Children should be fed three meals and two or three snacks daily. Diets rich in calcium and iron can protect young systems from lead poisoning. Foods high in calcium include milk and dairy products, canned salmon and green vegetables like

spinach and broccoli. Foods high in iron include meats, shellfish, iron-fortified cereals, dried beans and dried fruits.

No matter how careful families are in guarding against lead poisoning, it is essential that children be screened for lead poisoning, since this is the only way to detect lead poisoning. Public health officials recommend that children between six months and six years of age, especially one- and two-year olds, be screened at a doctor's office or local health department.

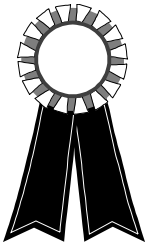
For more information about lead poisoning, contact your local county health department. Other resources include Claudia Rumfelt-Wright, Health Educator with the N.C. Childhood Lead Poisoning Prevention Program, at (919)-715-8497 or claudia.rumfelt-wright@ncmail.net; National Lead Information Center (800-424-LEAD); Consumer Product Safety Commission (800-738-2772 or www.cpsc.gov); Safe Drinking Water Hotline (800-426-4791); and Environmental Protection Agency (www.epa.gov/lead). ■

Employee Recognition

Prepared by Patsy West, Administrative Assistant, Section of Human Ecology and Epidemiology

The work that each employee of the Section of Human Ecology and Epidemiology performs on a daily basis is the key to the success of our programs. It is the individual contribution of hard-working and dedicated employees that allow us, working collectively, to make a difference in the lives of the people we serve – the citizens of North Carolina. In order to acknowledge outstanding work, the Section of Human Ecology and Epidemiology is selecting one person each quarter for formal recognition by the Section Management Team. All permanent employees and full-time federal assignees are eligible for recognition. Selection criteria are: service excellence, teamwork, heroism, volunteerism, safety and wellness, and significant contribution to the morale or effectiveness of their work unit.

The second recipient of the Employee Recognition Award is **NANCY GARRETT**. Ms. Garrett was nominated by many of her co-workers in the Occupational and Environmental Epidemiology Branch for **SERVICE EXCELLENCE**.



Ms. Garrett has almost 30 years of state government service, all of which have been in public health. As administrative assistant for OEE, Mrs. Garrett's dedication to OEE staff and programs is demonstrated by the tireless way she uses her tremendous knowledge and years of experience to assist supervisors in managing programs, while adhering to the state's various rules and regulations. She routinely demonstrates her ability as a major problem-solver as well as a problem-preventer. She anticipates needs, identifies problems and develops appropriate solutions before they become major issues. Ms. Garrett is always willing to go the extra mile and takes pride in doing her job well. Her devotion to the State of North Carolina was previously recognized through the Governor's Award for Excellence and the Department of Health and Human Services Legends Award. Ms. Garrett will receive a certificate of recognition for her service excellence and a gift certificate from the management of the section. ■

Carmen Hooker Buell Named Secretary of DHHS

Reprinted from Department of Health and Human Services webpage

Governor Mike Easley appointed Carmen Hooker Buell Secretary of the N.C. Department of Health and Human Services in January 2001. Hooker Buell, a former Massachusetts lawmaker and health care lobbyist, has spent her professional life working in health and human services.

Hooker Buell, 55, describes herself as a "passionate Tar Heel" devoted to improving the lives of all North Carolinians.

Prior to her appointment, she served as Vice President of Government Relations for Quintiles Transnational Corporation in Research Triangle Park. Hooker Buell served as the Group Vice President for Carolinas HealthCare System (CHS). She is also an Adjunct Professor at the UNC School of Public Health.

She was the primary legislative author of both the 1991 Massachusetts comprehensive health reform legislation and the Children's Medical Security Plan, which targeted young children not covered by medical insurance. Hooker

(Continued on Page 11)

Reported Communicable Diseases, January-March 2001 (by date of report)*

Prepared by Jean-Marie Maillard, Head, Office of Epidemiologic Investigation and Surveillance, General Communicable Disease Control Branch

Disease	Year-To-Date (First Quarter)			1st Quarter 2001	Comments/Note
	2001	2000	Mean (96-00)		
Campylobacter	**70**	96	102	70	
Chlamydia, labreports	**4,938**	5,057	4,646	4,938	
Cryptosporidiosis	**11**	3	1	11	Note 1 & 2
E. coli O157:H7	**14**	7	6	14	Note 3
Foodborne, other	**3**	1	4	3	
Gonorrhea	**4,066**	4,570	4,483	4,066	
Hemophilus influenzae	**18**	8	9	18	
Hepatitis A	**30**	60	42	30	
Hepatitis B, acute	**51**	81	72	51	
Hepatitis B, chronic	**110**	169	184	110	
Hepatitis C, acute	**6**	7	-	6	Note 1 & 4
HIV/AIDS	**307**	397	412	307	Note 5
Legionellosis	**2**	3	4	2	
Lyme disease	**2**	4	5	2	
Malaria	**1**	5	5	1	
Meningococcal disease	**36**	20	23	36	
Meningitis, pneumococcal	**22**	24	19	22	
Rabies, animal	**134**	118	143	134	
Rocky Mountain Spotted Fev	**6**	12	9	6	
Salmonellosis	**233**	177	215	233	
Shigellosis	**98**	26	65	98	
Strepto. A, invasive	**35**	31	-	35	Note 2
Syphilis, total	**253**	289	386	253	Note 6
Tetanus	**1**	0	0	1	
Toxic Shock Syndrome	**2**	0	0	2	
Tuberculosis	**52**	52	71	52	
Tularemia	**1**	2	1	1	
Typhoid Fever	**1**	0	0	1	
Vibrio vulnificus	**1**	0	-	1	Note 7
Vibrio, other	**2**	1	-	2	Note 2
Vanco. Resistant Enterococci	**153**	101	-	153	Note 2
Whooping cough	**23**	28	22	23	

Preliminary data, as of 4/5/2001. Quarters are defined as 13-week periods.

Notes: 1. "-" Means disease not reportable in this entire time period;
2. Became reportable 8/1/98;
3. Became reportable 10/1/94;
4. Became reportable as such 8/1/98; previously within other category ("Encephalitis"; and "Hepatitis, non A-non B");
5. Earliest report with HIV infection or AIDS diagnosis;
6. Primary, secondary and early latent syphilis; and
7. Became reportable 7/1/97.

(Continued from Page 9)

Buell co-chaired the North Carolina Health Care Reform Commission, served on the state's Workforce Preparedness Commission, and is a member of the North Carolina Institute of Medicine.

She received a bachelor's degree in sociology and political science from Springfield College and a master's degree in regional planning from the University of Massachusetts at Amherst.

Additional information on Secretary Hooker Buell can be found at the Department web site: http://www.dhhs.state.nc.us/whoisdhhs.htm#buell. ■

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Volume Number Change

With this issue, Epi Notes is returning to its original practice of identifying each issue by year (rather than volume) and issue number. Thus, this March - May 2001 publication is identified as issue 2001-1. Last year's issues are renumbered as follows: June - Aug. 2000 is 2000-1; Sept. - Nov. 2000 is 2000-2; and Dec. 2000 - Feb. 2001 is 2000-3. ■

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